

SCHOOL LIFE

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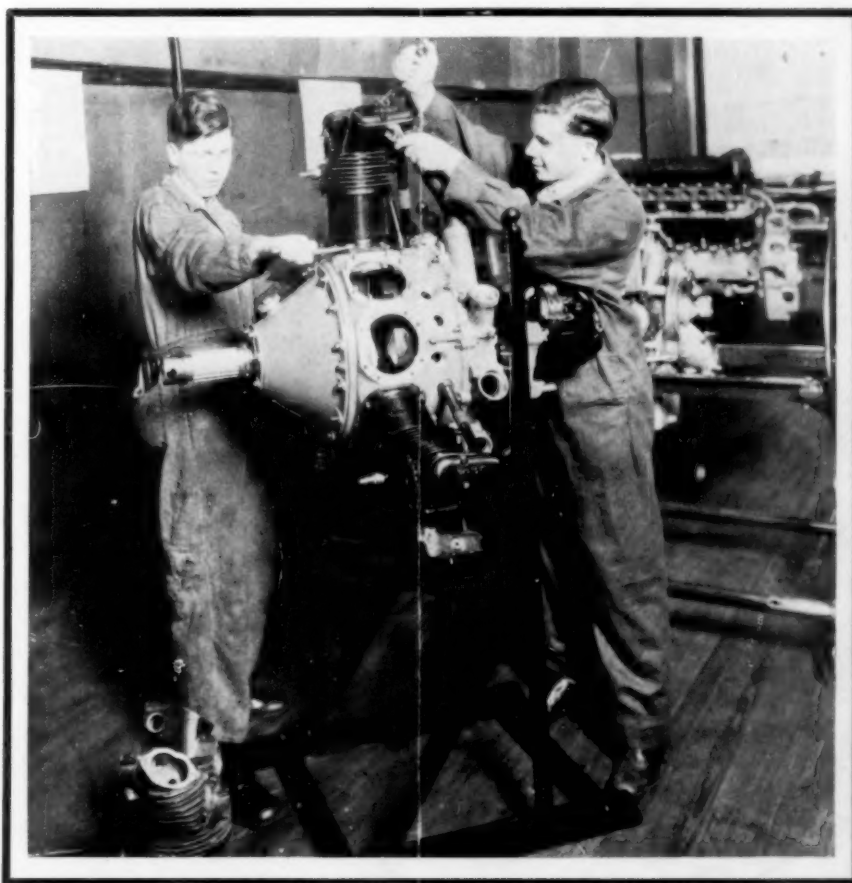
VOLUME XVII
NUMBER 1

In this Issue

Purchasing Power:
Education Creates It

Rare Government
Publications

Rochester Cares for
Its Handicapped



JOBS ARE WAITING FOR GRADUATES OF BUFFALO'S HIGH-SCHOOL AVIATION COURSE

SEPTEMBER
1931

In this Issue

Bandmastering
by Radio

Free Washington
Study Course

New Government
Publications

Official Organ of the Office of Education
United States Department of the Interior, Washington, D. C.

For sale by the Superintendent of Documents, Washington, D. C.

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SCHOOL LIFE

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Secretary of the Interior, RAY LYMAN WILBUR • Commissioner of Education, WILLIAM JOHN COOPER

VOL. XVII

WASHINGTON, D. C., SEPTEMBER, 1931

No. 1

Purchasing Power: Education Creates It

By WILLIAM JOHN COOPER

United States Commissioner of Education

IN CONSIDERING any standard of living we realize that the so-called "primary wants" must be satisfied first. Usually such wants are grouped under the three main headings of food, clothing, and shelter. In a primitive society virtually all human effort must be devoted to meeting these needs. The efforts to provide these very things engaged almost entirely the attention of the pioneer of the great American frontier.

After the frontiersman had located his future home and had rolled logs for his house, he cleared the forest, dislodging predatory animals, broke ground for cultivation, and proceeded to grow such crops and raise such animals as would provide food and clothing for his family. Not even literacy was required for success under such conditions. History tells us that as soon as possible after establishing his dwelling place, the American pioneer provided a school that would make his children literate. From such humble beginnings have developed our magnificent cities and the world's most complex civilization.

Wants Grow from Education

Other types of wants, which are usually termed secondary or cultural, arose. Among them are such desires as: A wish to communicate with one's fellows, which required for satisfaction a postal service; a thirst for information about other parts of one's country and the world, which demanded newspapers, magazines, and books for its satisfaction; a longing to participate in affairs beyond the limits of one's own community, which required at first roads, then railroads, then paved highways, and finally airplanes. Finally some leisure was secured which brought demand for entertainment, in-

volving music and musical instruments, chautauquas, theaters, concerts, and, in our own day, such devices as radio receiving sets.

That such wants and desires grow directly from education may not be clear to everyone. In fact, it is difficult to furnish to doubters evidence of the concrete type. However, figures of a type which can be readily understood indicate the truth of the statement. Mrs. Cora Wilson Stewart, who has devoted the major part of her professional life to an active war on illiteracy, tells us that:

Only 5 per cent of the illiterates deposit money in banks and only 10 per cent of them pay any taxes other than the poll tax. Iowa, the least illiterate State, has more farmers who own their farms than any other State, while Louisiana, the most illiterate State in 1920, has the fewest farm owners.

There is also a dearth of modern farm implements in illiterate rural sections as revealed by assessors' reports. Vehicles of all kinds are lacking and even such farm animals as milch cows and work horses are scarce. Illiterate localities are the poorest purchasers of paint, for not even the houses are painted. Assessors' lists also show little jewelry, silverware, and few clocks in the homes of illiterates. Moreover, State assessors' reports show

that in illiterate counties merchants carry meager stocks of goods and these consist of the poorer and coarser qualities.

Of the five States which showed the highest average per capita wealth in 1922 only one, Rhode Island, had an illiteracy in 1920 of more than the national average of 6 per cent and by 1930 this had been reduced to less than 5 per cent. These five States showed an average per capita wealth ranging from \$3,086 in Rhode Island, to \$4,007 in California. In the same year the four low States in which the average per capita wealth ranged from \$1,216 in Mississippi to \$1,773 in Tennessee, had illiteracy percentages ranging from 10.3 to 18.1. Whether one argues that education is a cause of purchasing power or not, it does appear impossible to deny that there is a high correlation between the two.

Effect on Newspaper Circulation

Again the desire for knowledge about the world and what is going on is probably well indicated by newspaper circulation. According to figures compiled in 1927 there are seven States and the District of Columbia in which newspaper circulation equaled 20 per cent or more of the inhabitants. In order of rank in circulation from high to low they are: Kansas, District of Columbia, Minnesota, Utah, Michigan, Iowa, and Nebraska, the two latter being tied with 20.3 per cent. In illiteracy rating these States vary (1926 statistics) from 0.8 per cent for Iowa to 2.3 per cent for Missouri. Although the illiteracy statistics of the 1930 census are not yet complete, they have been tabulated for 42 States, and among these are 7 States which reveal an illiteracy of 10 per cent or more. Only 2 of them, Alabama and North Carolina, have a newspaper circulation in excess of 5 per cent of the population. May we not claim education as a maker of newspaper circulation?

IF YOU ARE A

Superintendent—see pages 1, 6, 8, 13.

Elementary teacher—see pages 6, 11, 14, 19.

High-school teacher—see pages 8, 12, 19.

Student teacher—see pages 6, 11, 14.

Research worker—see pages 11, 13, 17.

Librarian—see pages 3, 11, 14, 19.

College instructor—see pages 10, 11, 13, 17.

Excerpts from speech delivered by Commissioner Cooper at the meeting of the National Education Association, held in Los Angeles, Calif., June 29-July 3, 1931.

As might be expected, a similar situation exists with regard to books. Maxwell Alely, writing in the *Publishers Weekly*, June 6, 1931, says:

* * * a high literacy rate seems to mean a proportionately larger number of the population who read books. The literacy percentages in the 1920 census shows the highest rates in the Eastern, North Central, and Pacific Coast States. I do not need to add for an audience of booksellers and publishers that these sections furnish the chief book markets of the country.

The South, with its high average of illiteracy—it ran up to 21.9 per cent in Louisiana in 1920—has long been a backward book market. * * * But it is significant that during the past decade when the South has been making strong efforts to eradicate illiteracy, book sales have increased. Ten years ago many publishers did not “bother” with the South; to-day there is no publisher of any consequence who is not represented in the South by his own traveler or by one who carries the lines of several houses.

I believe I could pile up an array of facts which would convince the most skeptical business man that every dollar invested in education brings returns to American business by creating a higher standard of living with the concomitant variety of economic wants.

Business Must Look to the Schools

I hold that the essential relationships of education and business are these: First, American education is a vast industry not growing out of simple needs of a society which cares for a standard of living that provides only food, shelter, and clothing, but developed in response to a secondary or cultural want; second, literacy and a continued education have developed the American standard of living, which creates business by giving people purchasing power. The future of American business lies in helping the schools to create a still higher standard of living with new cultural wants to be satisfied; and, third, that the amassing of fortunes which have blinded us to these facts has been due largely to exploitation of natural resources and capitalization of social aggregation. In the future business must undertake a scientific and fearless study of its own problems, a program which can be carried out only by schools, colleges, and graduate institutions of business administration; that if American business and American capitalism are to survive Russian Bolshevism and thereby keep American individual liberty from falling before a dictatorship such as exists in Russia, it will be through changing the attitude of business from self-interest and the accumulation of money as a measure of personal success, to an attitude of social service in which capital and labor work together for the good of the entire American Nation.

What Happened at the N.E.A. “Fair”

By WILLIAM DOW BOUTWELL

Editor in Chief, Office of Education

THE ANNUAL EDUCATIONAL fair called the summer meeting of the National Education Association, which opened in Los Angeles June 28 and ran day and night until the eve of Independence Day, was, indeed, the biggest ever.

The siren call of Southern California drew more than 15,000 teachers, supervisors, principals, and superintendents to the convention.

They thronged the “exhibits” of the “fair”; they wandered into general assemblies in the middle of purple paragraphs of blue ribbon speakers; they searched patiently in the superheated sunshine for afternoon sectional meetings; they shopped through the lanes of commercial exhibits subscribing for magazines, buying books, gathering harvests of free literature; they motored through Beverley Hills with friends who pointed out what they thought was Will Roger’s ranch, Pickfair, perhaps, and Gloria Swanson’s home, probably; they met school friends and professional friends they had not seen for years; they climbed a mountainside to a seat in the Hollywood Bowl to enjoy that native combination musical comedy and miracle show called the Mission Play; they played in the green waves that crash on California’s splendid beaches; they purchased presents in the department stores; and then they dispersed to San Francisco, Seattle, Alaska, Hawaii and the national parks. Everyone, in fact, collected ample supplies of pleasurable experiences and fresh ideas, which, after all, are the major and sufficient reasons for going to National Education Association annual meetings.

Four Innovations

President Sutton introduced four innovations in the speaking program. He built one general session around integrating all education; a second on education as youth views it; another on business and education; and devoted an entire day to problems of rural education. The latter program was a national conference called jointly by the National Education Association, the Federal Office of Education, and the National Congress of Parents and Teachers.

The integration of education program was unique in that it brought to the same rostrum representatives of the private schools, the parochial schools, the colleges, the universities, and the public schools, thus affording a remarkable cross section of American education.

The actual material American teachers work on, 25,000,000 boys and girls, are usually left behind when educators meet. At educational conventions hundreds of speeches are delivered about the children of America; they even appear in pictures; but this is the first convention within the memory of this writer that flesh and blood pupils appeared in person. Six representative student leaders from the high schools and colleges in the United States spoke for their fellow millions and acquitted themselves well. No speaker of the entire convention aroused more applause than Herschel Langdon, University of Iowa senior, when he said, speaking on *What I Would Do If I Were a College President*, that while research was all right in its place, college instructors should be chosen for their abilities as teachers. He struck a responsive chord.

Business and Education

The effect of the depression on school income brought the relation of business and education to the fore. What business thinks about education, if anything, was not very clearly presented, nor were the probable effects of recent economic tide rips analyzed or predicted. Educators, on their side, insisted that education be not permitted to suffer curtailment of expenditures. Probably the most soundly reasoned argument for maintaining and increasing expenditures for education was presented by the United States Commissioner of Education, and it is reproduced elsewhere in this issue.

Out of President Sutton’s conviction that the rural schools are the weakest link in the educational chain came the resolve to concentrate on their problems at Los Angeles. Representatives of great organizations dealing with rural life were invited; speakers from the Federal Farm Board, the American Farm Bureau, the Federal Board for Vocational Education, agricultural journalists, and others. During three sessions recognition that improvement in rural schools can only come with improvement in the economic status of the farmer recurred like a Wagnerian *leitmotif*. At the close a committee brought in a report asking President Hoover to call a national conference on rural education and culture.

Assurance that continued national attention will be given to the improvement of rural education appeared in the election of Miss Florence Hale, State supervisor of rural schools in Maine, as presi-

(Continued on page 5)

Collectors Prize Rare Government Publications

The Bulletins You Buy for a Few Cents May Soar to the High Values Placed on the Perry Report and the Jefferson Bible

By VIRGINIA DICKERMAN
Student in Journalism, George Washington University

WHEN YOU HAVE finished reading a Government report or bulletin do you realize that the printed matter which you hold in your hand may, in future years, be worth several hundred dollars?

There is a chance, for instance, that a copy of the first printing of the Wickersham Report, 2,000 copies of which were sold to the public for 15 cents within a week of its publication, may survive to find itself some years hence, when the prohibition struggles of the early twentieth century have become history, selling for a small fortune.

About 1781 the Continental Congress issued a bulletin of instructions "to the captains and commanders of private armed vessels which shall have commissions or letters of marque and reprisals." That does not sound especially exciting, does it? Yet four years ago one of the original bulletins sold for \$390!

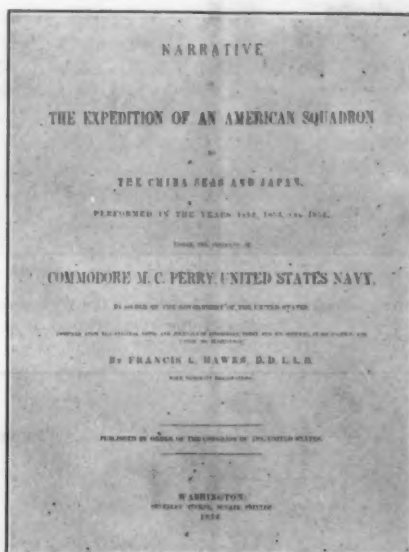
President Jefferson's message on the Lewis and Clark expedition, with a map of the Northwest territory, is worth about \$200. And a copy of the first national Thanksgiving Day Proclamation, made in New York in November, 1789, by President Washington, brought its owner the same amount a few years ago.

A copy of the first census, which gave the name of each household and listed the inhabitants of the various States thus: "Free white males of 16 years and upwards, including heads of families; free white males under 16 years; free white females, including heads of families; all other free persons; slaves" sold for \$130 in 1928.

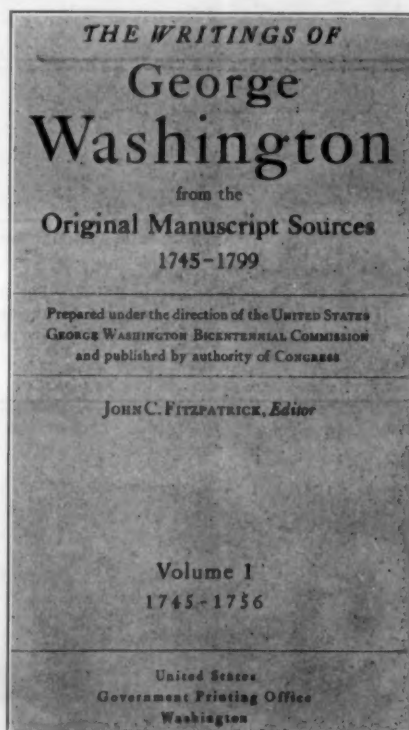
Volume Price-Marked \$1.50 May Sell For \$100

One of the largest industrial plants in the world is the United States Government Printing Office in Washington which, since its establishment on March 4, 1861, has undertaken practically all of the printing required by Congress and the various Federal departments, divisions, and commissions.

Sixty million copies of publications, printed at a cost of \$12,500,000, are distributed annually. Ten million of these are sold at cost to the public, most of them at a price under \$2 per copy. Yet many of them contain material which is of such great value scientifically or historically that when they are out of print much larger sums are offered for such copies as



TITLE-PAGE OF MATTHEW PERRY EXPEDITION REPORT



A RARE BOOK OF RARE LETTERS
This title-page is from Volume I of the forthcoming "The Writings of George Washington," for which there is already a large demand. Washington was a prolific writer. His collected writings are expected to fill 25 volumes which the Government Printing Office will offer for sale. The set, which is to be a masterpiece of modern printing, will undoubtedly enter the list of Government rare books.

may be available for sale. Some of them even enter the charmed circle of collectors' items, and a volume which left the printing office price-marked \$1.50 may find itself selling for \$100.

Such is the case of the Jefferson Bible, more properly known as the "Life and Morals of Jesus of Nazareth," the title which Thomas Jefferson himself gave to his manuscript.

Jefferson collected New Testaments written, respectively, in French, Latin, Greek, and English, and, as he wrote in his introduction, "cut from them every text they had recorded of the moral precepts of Jesus, and arranged them in a certain order, and although they appeared but as fragments, yet fragments of the most sublime edifice of morality which had ever been exhibited to man." The various translations of each text were pasted parallel to each other on a page.

In 1904, upon order of Congress, more than 9,000 copies of the manuscript were made by Joseph Nanz, of Chicago, and were bound at the Government Printing Office in red morocco with gold vine ornamentation. The selling price was then \$2.25 but to-day if any owner can be induced to part with a copy he demands at least \$100.

There is now on the press of the Government Printing Office the first volume of a set of 25 books which will undoubtedly be among the most valuable of Government publications. This set consists of the writings of George Washington. It is published by the George Washington Bicentennial Commission and will probably be sold on a subscription basis to libraries and similar institutions for \$50. The price at which it will be sold to individuals has not yet been determined. It is probable that available copies will increase rapidly in value after the supply has been exhausted.

Prices of Rare Books Vary From Year to Year

Of course the prices for rare books are very unstable and change as often as the volume changes hands. The prices which are mentioned in this article are those at which copies of the documents named have sold recently, not those at which the publications will sell in the future.

In 1925, a report of the Superintendent of the Coast and Geodetic Survey, 1855, which contains a plate by Whistler, sold

for \$8; and in 1926 for \$15, an increase of almost 100 per cent.

Age Not the Only Factor in Determining Value

One factor which helps to determine the value of rare Government documents, in addition to the reliability or historical character of the contents, is the rarity of the information contained in it. An illustration of the way in which this quality functions is to be found in the annual report of the Smithsonian Institution for 1893 which owes its considerable pecuniary value to an article which it contains on *The Poisonous Snakes of North America* by Leonhard Stejneger. This article is still a standard dissertation on the subject. In this report, also, is an article on ancient Chinese games from which an enterprising hostess might obtain "something new" in the way of modern entertainment.

Age is not so important a factor in determining the value of rare publications as it is commonly supposed to be and several comparatively recent Government documents have already increased markedly in value.

A *Handbook of California Indians*, a Smithsonian Institution publication of 1925, which, when issued, sold for \$2, was quoted in 1930 by one seller of rare books at \$25. A report by Vernon Bailey, entitled "*A Biological Survey of North Dakota*," printed in 1926 and sold at that time by the Superintendent of Documents for 60 cents, is now, only 5 years later, worth \$10.

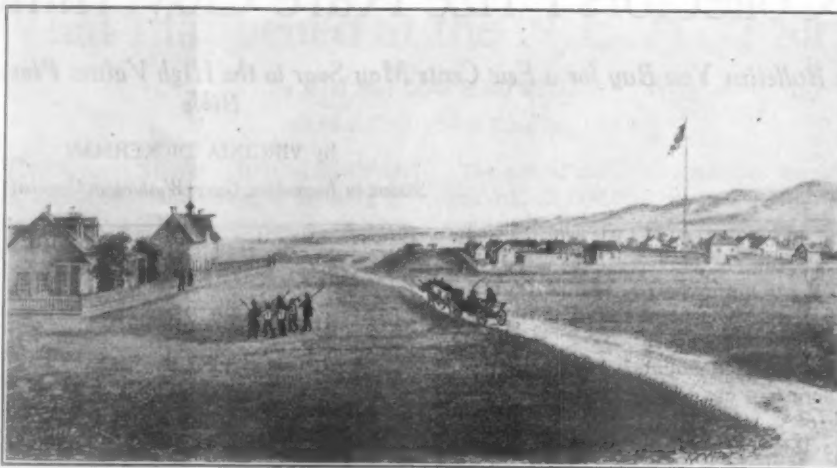
State Governor Author of Rare Pamphlet

The condition of the publication helps to determine its price also, because lovers of rare books have great reverence for the art of bookmaking, and usually a volume, the binding of which is broken and the pages of which are torn or disfigured, is vastly inferior to its fellow that presents as pleasing an appearance to the eye as its maker intended that it should.

So be careful not to tear out the leaves of that report which just arrived from Washington, and do not soil its pages with your pen—unless you expect to become famous some day, in which case your scribbles may add to the value of the report. Joseph Pennell, in his biography of James Whistler, tells us that the artist who in his early manhood was employed as an engraver by the Government, spent so much of his time engraving superfluous designs around the edges of his plates that he was asked to leave.¹ One of these plates is now among the priceless treasures of the Freer Art Gallery in Washington.

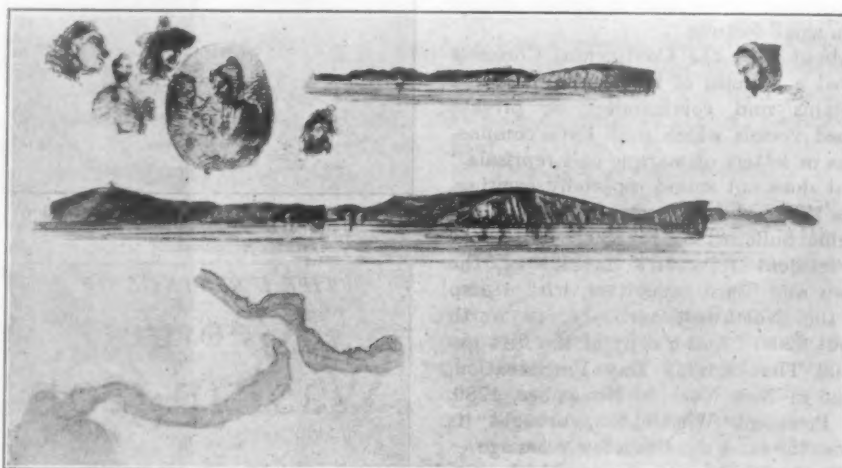
In 1894 a young man who was destined to become a Governor of Virginia wrote a

¹ Coast and Geodetic Survey officials say that Whistler simply did not report for work. There is no record of his having been discharged.



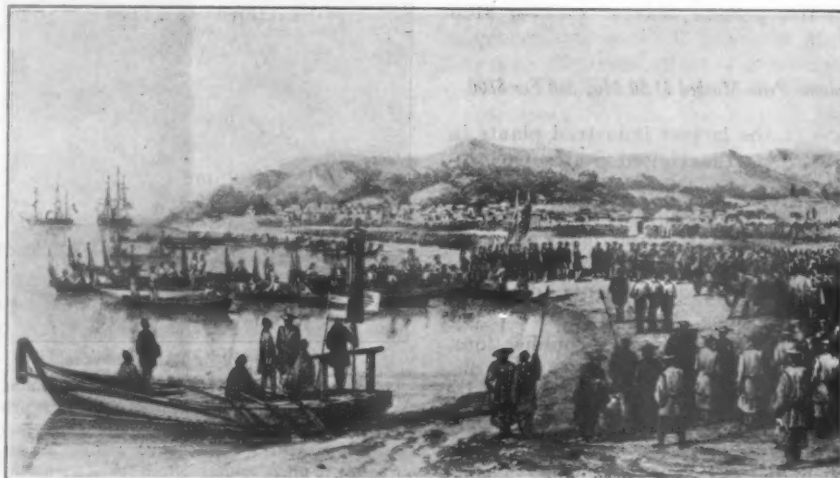
A STREET SCENE IN THE CITY OF WALLA WALLA, WASH.

In an official report of road building in the West, a document published by the Government Printing Office two years after it was created, appears this old print of Fort Walla Walla.



WHISTLER MIXED HARBOR ENTRANCES AND PORTRAITS

Probably Whistler's first etching is "The Heads," which he produced on a plate at the United States Coast and Geodetic Survey in 1854-55. The etching is supplemental to a view for clearing Harding Ledge, Boston Bay, Mass., prepared for direction of navigators. J. R. Key, one of Whistler's fellow draftsmen, purchased the original plate for the price of old copper. It is now in the Freer Art Gallery, Washington, D. C.



MATTHEW PERRY'S ARRIVAL WHICH MARKED THE OPENING UP OF JAPAN

Cameras had not been invented in 1853. Drawings "from nature," the next best thing, depict the stirring scenes reported in the 3-volume account of the historic American expedition to the "China Seas and Japan."

report on the Pumunkey Indians of Virginia for the Smithsonian institution. That pamphlet is already rare, and it would not be surprising if in after years when John Garland Pollard has become an historic figure, this report might be listed among collectors' items.

Another governor, Gifford Pinchot, of Pennsylvania, in 1903 wrote a bulletin called "A Primer of Forestry." As a report by one of the pioneers of forest conservation who is also one of Pennsylvania's favorite sons, it is probable that the primer will have a place among the literary treasures of coming years.

Reports Thrilling as Well as Valuable

One of the most fascinating groups of Government publications which have become collectors' items are the reports of great expeditions and explorations.

Among the most valuable from a pecuniary standpoint is the report of the Pribilof Islands by Henry L. Elliott, written about 1868, when that group of Alaskan Islands became a fur seal reservation of the United States. It is worth about \$75 to \$100.

Lieut. Joseph C. Ives's Report Upon the Colorado River of the West describes a trip down a valley which had been until that time (1857-58) unseen by white men. They had exciting adventures and the record they have left us, illustrated with maps, panoramic views, engravings, wood cuts, and Indian portraits gives us a vivid picture of the Colorado territory as the Indians knew it. If you like thrilling stories of outdoor life, do not miss reading this one.

The first volume of Matthew Perry's report on his expedition to Japan deals with the Japanese people and their social customs and is as engrossing as any novel or book of travel that may be found in popular book lists. Dr. Francis L. Hawks, who served as an official reporter of the expedition, wrote the whole report in a style that is as entertaining as it is informing.

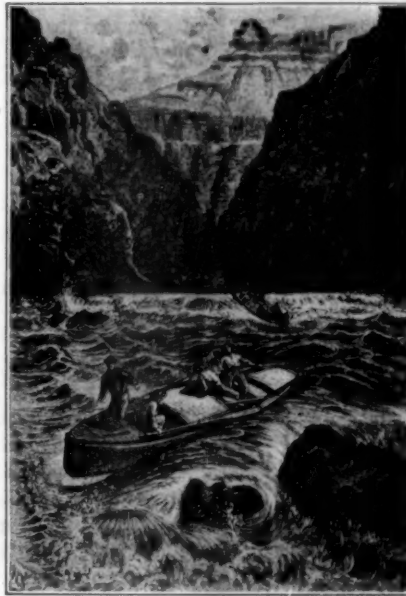
Doctor Hawks notes that the secluded islanders were curious about the hundreds of mechanical contrivances from steamboats to buttons (to the sash and kimono-clad Japanese the latter were as odd as the former) which they saw for the first time when Perry's ship called at their ports. Furthermore, they understood the explanations that the Americans made to them of mechanical devices and engineering principles and considered the phenomena to be valuable additions to their own civilization, thus exhibiting in their first contact with the West that adaptability to occidental ideas and customs which brought them, in less than 65 years, into the front ranks of the nations of the world.

Doctor Hawks describes the hospitality and courtesy which Perry and his men were shown in the homes of the Japanese officials, but the friendly smiles of the women sent shivers up and down the backs

agricultural situation in Japan at the of the Americans, because the married women blackened their teeth and discolored their gums horribly with purple spots.

"We should," he says, "think that the practice was hardly conducive to conjugal felicity, and it would be naturally inferred that all kissing must be expended in the ecstasy of courtship. This compensation, however, is occasionally lost to the prospective bridegroom, for it is not uncommon for some of the young ladies to inaugurate the habit of blacking the teeth upon the popping of the question."

This volume contains a description of rice culture which reveals much about the



NEARLY A MILE IN THE DEPTHS OF THE EARTH
Old wood-cuts depict the dangers that threatened the first expedition to explore the canyons of the Colorado. The Government report of the trials and adventures experienced by Prof. J. W. Powell and his companion naturalists and students who risked their lives in the name of science, is a document as thrilling as Admiral Byrd's "Little America." Their findings were printed in 1874 by the Smithsonian Institution as an illustrated United States Government publication.

time. It also contains a letter from President Fillmore to the Emperor of Japan and the reply of the latter.

Other volumes of the report discuss the fish, shells, birds, and other characteristic products of China, Japan, and some adjacent islands. One volume tells of a visit to Siam, which at that time had two kings, both of whom, to the visitors' surprise, spoke English.

Picturesque scenes of temples and gardens; kimono-clad ladies with high head-dresses and gorgeous fans; rice fields and boats are shown in the lithographs and woodcuts which occur in large numbers in the report. And in one corner of most of the illustrations is the legend, "Drawn from Nature," so that we may be sure that the charming scenes which they depict are genuine. These illustrations may

sometimes be found, as may be the illustrations of other reports, in shops specializing in rare prints. They sell at various prices from 50 cents to \$3.

Out of the millions of documents which the Government Printing Office produces year after year there will always be some volumes which will become the prey and pride of collectors because in them is contained a record of an event or discovery which has meant much to the people of the Nation, and because they bear the imprint of men and women who did their work so well that it can not be forgotten.

The highest price ever received by the Superintendent of Documents for a new publication was only \$20, a 2-volume work which will be consulted and esteemed as long as this Nation endures. Centuries from now Glenn Brown's History of the Capitol, which tells, through illustrations, the story of the construction of the Capitol from 1792 to 1900, will still be read and prized as a remarkable example of work from one of the largest publishing houses of the world, the United States Government.



Office of Education to Aid in Pennsylvania Survey

W. S. Deffenbaugh, chief of the division of American school systems, United States Office of Education, has been assigned by William John Cooper, United States Commissioner of Education, to represent the Office of Education in connection with the study to develop a 10-year program of public education in Pennsylvania. It is evident that in the formulation of Pennsylvania's program the results of the national surveys in secondary education, teacher preparation, and school finance, being directed by the Federal Office of Education, will be used extensively.

N. E. A. Meeting

(Continued from page 2)

dent of the National Education Association.

Resolutions adopted by the National Education Association which particularly concern the Federal Office of Education recommended the national survey of school finance, which started on July 1, and urged that the Office of Education be authorized to undertake surveys of education for exceptional and handicapped children and of rural education.

More than 3,000 teachers visited the Office of Education booth and inspected the numerous publications on display. This was the first display of its publications which the Federal office has ever made on the exhibit floor of the annual meeting of the National Education Association.

"SCHOOLS CAN NOT equalize children. Schools can only equalize opportunities."

Having accepted that policy the Board of Education of Rochester has gradually extended its endeavors to "equalize opportunities" until to-day it has 16 special services for the handicapped children of the city. These services range from hospital classes to an orthopedic school, and from classes for lip reading to an open-air school.

These 16 services aim to "equalize opportunity" for the child who is physically handicapped, the child mentally handicapped, and the child socially handicapped.

The Mentally Handicapped

Training for the mentally handicapped, which was inaugurated as early as 1906, is required by State law. Teachers are required to qualify for their work and the State places limits upon the size of the classes. The number in a class depends upon ages of the pupils. Those entered in the classes have an I. Q. between 50 and 70. For each class meeting the requirements laid down the State contributes \$1,400.

It has been found that all pupils needing educational and social adjustment do not fall within the State requirements for special classes; hence, ungraded classes have been organized. This practice cares for unadjusted pupils in schools where there are no slow-moving grades. Special and ungraded classes in various elementary schools provide for the seriously retarded who have demonstrated their inability to succeed in regular grades.

At the recommendation of the principal, pupils who are candidates for either special or ungraded work are examined by the child-study department after consultation with parents. All factors influencing learning, such as physical condition, home environment, and school history, are taken into consideration. A child is sent, on the basis of the findings, to a center where his needs can best be met.

Aims in Helping Pupils

The organization for the education of the mentally handicapped strives in various ways: (1) To make the pupil "free to learn" by the correction of physical defects and cooperation between school and home. (2) To help a pupil to establish health habits and principles of living which will mean right attitudes toward the family, associates, work, and himself. (3) To give to each pupil according to his capacity working knowledge of reading, numbers, and English and an acquaintance with nature study, geography, and elementary science. (4) To enable each pupil to use his leisure time profitably and happily. (5) To develop habits, skills, and attitudes which will make him self-supporting in unskilled or semiskilled labor.

Because the seriously retarded are limited in their associations, concepts, and ideas; because they do not recognize likenesses and differences readily; because they are slow in their responses; because they are poor in judgment and can not think abstractly or make generalizations—because of all these facts it is apparent that it is only through experiences in which they are interested that habits, attitudes, and skills can be developed. A trip around the school block may be made to furnish material for reading, spelling, English, local geography, nature study, and arithmetic. The making of a playhouse, a trip to pet animal shops, or a visit to a municipal building will furnish engaging material for a month.

Different Work of Girls and Boys

At 13½ years the boys (if physically sound) attend the shop schools. The Boys' Prevocational School offers cabinetmaking including mill work, assembling and finishing, shoe repairing, elementary auto mechanics, and printing (for the ungraded).

How Rochester Cares for

By EDITH A. SCOTT

Director of Special Education, Rochester, N. Y.

West Side School for Boys offers brush and broom making, tin smithing, shoe repairing, and a mechanics' shop.

In girls' prevocational classes the pupils learn child care, cooking, serving, laundry, sewing, and various kinds of hand work which will help them to make their own homes more attractive. In several centers there are demonstration houses which offer opportunities for furnishing and beautifying houses which are very much like their own homes.

While the many first-hand experiences are used to teach the "essentials," the major aim in all classes is to train for what might be thought of as by-products, those qualities which make for human fitness—cleanliness, punctuality, courtesy, cheerfulness, truthfulness, ability to work happily with others, a respect for materials, an appreciation for standards of work, a sense of fairness, and right attitude to employer. A teacher who does not see the opportunities for building up an appreciation for these by-products should not be a teacher of special classes.

The One-Legged Boy Makes Goal

In 1920 the Orthopedic School was organized with 13 children. To-day the school enrolls 146. Since its initiation 476 children have passed through the clinic and 394 have at some time attended the school. Fifty have gone to junior and senior high schools.

Before entering, pupils are examined by an orthopedic surgeon. The third floor of the John Williams School No. 5 is the Orthopedic School. The classrooms have furniture adapted to individual needs. Rooms for corrective work are equipped with a baker, an Alpine lamp, and many other appliances. Six trained physiotherapists carry out directions under the guidance of the physician. Each child has a health folder containing history of the case, the family history, X rays, photos, operative sheets, hospital care, directions for use of special appliances, and often pictures before and after operations.

The daily program is practically that of the normal pupil, except for the corrective work periods.

One day I stood watching four or five "lame and halt" orthopedic boys play a game of handball. The boys flew about on

Organization of schools and classes for the handicapped

Class or school	Enrollment	Teachers
For the mentally handicapped:		
1. Special classes for the permanently retarded.....	728	38
2. Special classes for the backward.....	216	10
3. Boys' Prevocational School.....	208	13
4. West Side School for Boys.....	156	9
For the physically handicapped:		
5. Orthopedic School.....	146	4
6. Children's Convalescent Hospital.....	30	3
7. Open Air School.....	70	4
8. Iola Sanitarium School.....	80	4
9. Hospital classes.....	40	2
10. Classes for the hard of hearing.....	20	2
11. Classes for sight conservation.....	36	3
*12. Classes for speech correction.....	773	6½
*13. Classes for lip reading.....	275	3½
For the socially handicapped:		
14. The shelter.....	45	2
15. Behavior class.....	12	1
16. English for the foreign born.....	68	3
	2,901	108

*Itinerant teachers.

Handicapped Children

One of a series on education of exceptional and handicapped children. Next month: "Opening Windows on Nature for Blind Boys and Girls"

crutches, slid across the floor, even the 1-legged boy managed as by a miracle to make a goal.

The Orthopedic Scout Troop

In the fall a group of 22 spastic primary children will be placed with one teacher. Their development will be carefully recorded. So little is known of the potentialities of this group that it is hoped that much help will come from the study.

The social lives of these children are carefully fostered. There is a large troop of Boy Scouts and one of Girl Scouts, the first orthopedic scout groups ever organized. Dramatic clubs prepare assembly entertainments. Then, there is the "Sunshine Camp" on the lake. This is a combined home and school during nine weeks of the summer. Two teachers and a physiotherapist attend the camp.

Another agency for the handicapped is the children's hospital on the lake front. Here are operative, cardiac, and nervous cases. Three teachers serve these children. Some children in the hospital attend the Orthopedic School when they are well enough to come back home.

An open-air school has been established on the edge of the city in an ideal natural setting. The daily program has in it everything that will help bring the children back to health—medical advice, good food, rest, fresh-air classrooms, out-of-door play, gardening, eight weeks, summer school, and a hopeful atmosphere of good cheer. Who could not get well under such ideal conditions?

Teachers in Hospitals

South of the city is Iola Sanitarium for the tubercular. Here 80 children taken from homes where some member has had tuberculosis attend school. Certain bed patients recommended by the doctor also receive instruction. Most of the children, when returned to their home schools, show no loss of school performance. They pass their grades.

Doctors know, and so do we, that happy patients get well faster than those who fret. For this reason the board of education has sent a teacher to each of two of the largest hospitals. The rooms they preside over are busy places. The amount of time spent in "lessons" depends somewhat upon the immediate interests and needs of the children. Each teacher has prepared herself for the therapeutic work that is so vital to these particular pupils.

Sight-saving and hard-of-hearing classes form a center in one of our new school buildings, where the rooms are large and well lighted, and where there is an excellent dining room. Pupils come to the school by bus. Pupils with handicapped sight or hearing spend part of each day in the regular classrooms of the school. By this means standards of scholarship are maintained and pupils come to feel that they are part of the school life. Teachers of these classes plan their procedure, of course, to the needs of the individual pupils, all of whom are seriously limited because of their special handicaps. In the sight-saving classrooms, the furnishings, the teaching material, and the program have been adapted to the special pupil needs. For the hard of hearing a multiple loud speaker, which is an aid in correct pronunciation, has been installed.

Speech is the tool which has been invented by man to express his ideas. Nothing can be more harmful to self-confidence

than defective speech. Inhibitions common to children and adults arise more often than we realize in defective speech. Minor speech defects, aside from preventive orthodontia or minor operations, can be treated directly, but stuttering, which seems to be a symptom of mental maladjustment, must be treated by indirection. Every child who stutters, regardless of his class, receives the attention of a speech teacher who treats each pupil individually. In Rochester last year 148 pupils were treated for stuttering. An oto-laryngologist, who is a speech specialist, sees all pupils who have major speech difficulties.

Testing for Hearing

Once every two years every pupil above the 2B grade, including junior high school, is examined by Audiometer 4A and the otologist. The results fall into four heads, viz:

Hearing	City per cent	Key to placement	Classroom adjustment
Normal.....	90.4		Pup treated where found.
Borderline....	7.9	9-12 units loss in either ear..	Front seat with better ear to teacher.
Serious.....	1.6	15 or more in better ear, 24 in one ear.	Front seat with better ear to teacher. Lip reading recommended.
Very serious..	.1	30+ in each ear, or 24+ showing marked retardation in school progress.	Class for hard of hearing recommended.

At the first of each year the otologist examines all pupils who are receiving lip reading. In order to detect needs in the kindergarten, grades I and IIB as early as possible, the otologist examines these children in the schools where he is making regular examinations. Through the cooperation of the school nurses and hospital clinics, all of those whose parents can not afford to pay are given preventive treatment. Practically every child in Group III recommended for lip reading receives instruction.

Finally there are three agencies for the socially handicapped. In the public schools there is one class for adolescent boys who have not been able to adjust to their regular school environment the seniors' behavior problems. The board of education takes charge, also, of the education of delinquent children temporarily detained in the city shelter, which is conducted by the Society for the Prevention of Cruelty to Children.

Third is the work for the non-English-speaking group which aims to teach the English language and help the children to become socially adjusted. Since many of the children have had no educational advantages before coming to America, they must also be given the educational background which will prepare them to enter the grade for which they are physically, socially, and mentally prepared. Thus by 16 different avenues of effort does Rochester, N. Y., "equalize opportunities" for its handicapped children.

Expand Hershey School; Will Enroll 1,000 Boys

Hershey Industrial School, Hershey, Pa., founded by M. S. Hershey, chocolate manufacturer, to educate orphaned boys, will be enlarged at a cost of \$1,500,000 to accommodate 1,000 boys. The present school has an enrollment of 350 boys who reside on the premises. Elementary and junior high school academic and agricultural education work will be taught in the structures now standing, while the new buildings will provide quarters for orphaned boys of high-school age.

Bandmastering by Radio

By JOSEPH E. MADDY

Professor of Music, University of Michigan



LAST OCTOBER a superintendent of schools in a small Michigan town asked me if I believed the playing of band and orchestra instruments could be taught successfully by means of the radio in order to bring such instruction within the reach of rural communities which can not afford to engage a band teacher. Four months later more than 3,000 children throughout Michigan, Ohio, Indiana, and Pennsylvania were learning to play through radio lessons given by the University of Michigan.

A course of five half-hour lessons was organized as an experiment to test the practicability of attempting to secure classroom participation in so highly specialized a subject as the playing of band instruments. The lessons were given during school hours, at 2 o'clock in the afternoon.

Both the State department of public instruction and the University of Michigan sponsored the course. The State department sent letters to all school superintendents in Michigan announcing the program, cautioning against haphazard participation, and urging them to place a teacher (not necessarily a music teacher) in charge of each class to see that the students received the instructions without interruption.

The response was immediate. Requests came in for 3,800 free lesson booklets. Each booklet served 17 pupils because the pages containing the music

for the various instruments could be separated.

The booklets gave general instructions about the lessons and told what would be expected of each student. The music consisted of 15 well-known songs which I estimated could be learned at the rate of three songs at each lesson. All band instruments except drums were included in the course—all to be taught at once. The procedure was simple and was based entirely upon active participation on part of the pupils.

A studio band was recruited from University of Michigan students. It used one instrument of each type taught. The band played and sang each song several times. The pupils at their radio loud speakers sang along with the radio band until they had memorized the tune. Then the studio band played the tones used in the song, holding each tone long enough to permit the pupils, or most of them, to match the tone on their instruments. Then the studio band and pupils played the song together several times, after which the studio band added the harmony while the pupils played the melody. The effect, at the receiving end of the experiment, was that of a complete band, with pupils playing the melody accompanied by the studio band.

Within 15 minutes of the time they first attempted to play a band instrument these pupils experienced the thrill of playing in a real band.

Students Set Fast Pace

The lesson booklets contained post-card questionnaires (called criticism cards) to be mailed to me after each lesson. These enabled me to correct weaknesses in the method of presentation, especially in regard to timing of each lesson to meet the average student's ability.

Replies received after the first lesson indicated that 98 per cent of the students could progress more rapidly than I had anticipated. After the second lesson many students wrote that they could play all of the 15 tunes. Several of the students joined their school orchestras after two of the radio class lessons. After the third lesson practically all of the students reported that they could play all of the pieces. Henceforth I was forced to add new songs by the rote method. The students asked for more lessons and the course was extended to six lessons.

The last lesson was a combined lesson and demonstration. The previous week I had invited each class within 100 miles of Ann Arbor to send to Ann Arbor to participate in broadcasting the final lesson one member who had received no other musical instruction than the radio lessons. Twenty students, ranging from 10 to 16 years in age, came and successfully replaced the studio band for a full-hour program which included familiar and unfamiliar unison and part songs, solos, duets, and trios. This lesson was conducted precisely like the previous lessons except that the children who had learned to play entirely by means of the radio course served as the demonstration band. There was no longer any shadow of doubt as to the practicability of teaching band instruments by radio.

Advantages of Radio Teaching

Immediately after the fifth lesson I visited 20 of the radio classes scattered throughout Michigan. From these visits I was able to compare the work of the various groups with similar classes directly taught. Three advantages of radio teaching were at once apparent:

(1) Students in the radio class developed better tone quality than those in regularly taught classes because the former had in the studio band good tone quality to imitate.

(2) Usual blatant tone quality of beginners must be controlled in the radio class because the pupils are forced to play softly to enable them to hear the studio band above the sound of their own instruments.

(3) Parent supervision of student's work is frequent with radio pupils, while it is quite unusual in most education. Mother listens to the lesson at home then tests the child when he returns from school.

The best classes I visited were those in charge of grade teachers or vocal music teachers who followed instructions implicitly because they knew nothing about the instruments being taught. The poorest classes were those in charge of band leaders or band players who knew something about the instruments. They supplemented the radio lessons with their own instructions, which always consisted of rhythmic exercises and other problems and only served to distract attention from the fundamental things—tone quality and musical expression.

I felt that most of the pupils in the classes I visited learned more in the five radio lessons than they would have learned if I had taught each class in person. The pupils were tremendously enthusiastic over their accomplishments. Every class that I visited had arranged to continue as a school band.

Classes of 20 students seemed to progress best. Smaller classes were too informal, while larger classes often played so loud that the players could not hear the radio.

Differences in age seemed to make little difference. Three 10-year-old girls, who were among those participating in the demonstration broadcast, played as well or better than the older children in the group. Practically all of the students in the classes visited were able to play the 15 songs in the lesson booklets and many had learned additional tunes which they had found in hymn books, or tunes they had sung or heard.

While the Baby Slept

While my chief concern was in the experimental classes conducted during school hours and under school supervision, the lessons proved equally successful in the case of adults taking the lessons privately in their homes. Most adults are self-conscious, and though anxious to learn to play a musical instrument, are unwilling to be seen carrying an instrument to and from lessons.

Many such individuals welcomed the radio course because they could learn to play in the privacy of their own homes, without telling their neighbors. Letters attest to this. Five relatives, who lived on farms within a radius of 55 miles, each took the lessons at home, then assembled for group practice. One mother thought the lesson period had been timed to suit

the convenience of young mothers, so they could take the lessons while the baby was enjoying its afternoon nap.

I have long believed that so-called educational radio programs which attempted to combine entertainment with instruction could not attain permanency and that actual classroom participation is necessary in radio education if it is to endure. The purpose of this experiment was to prove that highly specialized participation is possible if the radio lessons are adequately planned and supervised.

The radio band course was not supplementary to other courses being taught in school, but was a separate unit of endeavor, controlled entirely from the broadcasting studio. How long such a course could continue before interest began to lag is an unsolved question. I believe that 10 to 15 lessons would be the limit, after which interest would decline because of individual differences among the pupils. Perhaps I am wrong. It might be possible to extend a course through an entire year by so planning the work that a new starting point could be reached at certain periods.

Successful teaching of nearly 4,000 students of varying ages to play 12 different musical instruments at the same time is proof that the field of radio education is far greater than most of us have ever realized. But radio education must not be combined with, or confused with, radio entertainment or both will fail.

I thoroughly agree with the educator who once said, "Radio education begins when you get pencils and paper in the hands of students and the pencils begin to work." Whether it be pencil, ruler, or band instrument, the psychology is the same and the measure of success of all radio education can be determined by the amount of whole-hearted participation by the pupils.

Youngstown and Mississippi School Surveys Started

The Office of Education is now co-operating in conducting three sectional education surveys in addition to the three national surveys on secondary education, teacher preparation, and school finance, according to Dr. L. R. Alderman, chief of the service division.

Surveys are being made of the Youngstown, Ohio, public school system, the publicly controlled schools of Mississippi, and the Southern Appalachian Mountain Region.

At the invitation of the Youngstown Chamber of Commerce and Board of Education, the Office of Education consented to make a study of the city's schools. Considerable information has been collected and actual survey work will begin in September.

The Mississippi study is being made at the invitation of the Brookings Institution, Washington, D. C., and the State.

Early in 1931 the United States Department of Agriculture asked the Office of Education to cooperate in a social and economic survey of the Southern Appalachian Mountain Region, the office to be responsible for that part of the survey relating to education. Most of the work will be devoted to comparing information now available in the various States located in the region and in the offices of the Government departments. It is contemplated that about three years will be required for the completion of this study.

Last year the Office of Education completed a survey of the Buffalo, N. Y., public-school system, and in April a survey was made of home economics education in the junior and senior high schools of Montclair, N. J., with recommendations for curriculum revision.



Williamsburg Region Made National Monument

Recognizing the importance of Williamsburg, Va., both from a cultural and an educational standpoint, President Hoover included the Williamsburg area, by proclamation, in the Colonial National Monument, which insures future preservation of the historic region. Jamestown and Yorktown are the other two historic areas included in the preservation project.



Provision for instruction in character education is made in school systems of 156 cities out of 171 replying to a questionnaire sent out by the Office of Education. Of the 156 cities 134 introduce it with other subjects, and 22 as a separate study.



SCHOOL LIFE

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The Good That May Come From Depression

UNFORTUNATE as the depression is, one can not lose sight of a real good it will have on the administration of schools. It has caused educators to study the whole administrative system in many places and already there is an unmistakable trend in the direction of a more business-like handling of this phase of public service. It may very well be that out of the present plight, education will be reorganized in many places where its administration is faulty, where there is rivalry, duplication, waste, and lack of coordination.

This is particularly true of administering education in the higher institutions. It is recognized that there are no universally applicable principles governing the organization and administration of higher institutions. Each case must be decided in the light of all the facts which bear upon it. It is pretty generally recognized, however, that competition rather than cooperation among the several States supporting institutions of higher education is the prevailing spirit.

Already there is a tendency of States to coordinate the scattered and rival educational activities among their State-supported schools of higher learning. The Office of Education has just published the survey on public higher education in Oregon made by a commission appointed by the Federal Commissioner at the request of the State with which the office cooperated.

The problem of Oregon is not a new one. To overcome a heterogeneity of administration and lack of uniformity among the five State-supported higher institutions, the legislature enacted a law creating a State board of higher education whose purpose was to unify their activities. Rivalries existed between the land-grant institutions and the State university, and teacher-training institutions introduced other complications. The commission made a thorough study of the entire administration of these institutions and

The Luck of Being a Dunce

BEING SO LONG in the lowest form I gained an immense advantage over the cleverer boys. They all went on to learn Latin and Greek and splendid things like that. But I was taught English. We were considered such dunces that we could learn only English. Mr. Somervell—a most delightful man, to whom my debt is great—was charged with the duty of teaching the stupidest boys the most disregarded thing—namely, to write mere English. He knew how to do it. He taught it as no one else has ever taught it. Not only did we learn English parsing thoroughly, but we also practised continually English analysis. * * *

As I remained in the third form (B) three times as long as anyone else, I had three times as much of it. I learned it

thoroughly. Thus I got into my bones the essential structure of the ordinary British sentence—which is a noble thing.

And when in after years my school fellows who had won prizes and distinction for writing such beautiful Latin poetry and pithy Greek epigrams had to come down again to common English, to earn their living or make their way, I did not feel myself at any disadvantage. Naturally I am biased in favor of boys learning English. I would make them all learn English; and then I would let the clever ones learn Latin as an honor, and Greek as a treat. But the only thing I would whip them for is not knowing English. I would whip them hard for that.—*Rt. Hon. Winston S. Churchill: "My Early Life: a Roving Commission."*

recommended a coordinated and unified system.

When funds first became available for agricultural and mechanic arts courses, some States set up colleges within the university while others erected distinct land-grant institutions. Rival colleges have resulted in many instances, each gradually duplicating the other, whether fitted for offering certain instruction or not.

North Carolina has recently appointed a single board of regents to bring about some unity there. The Federal Office of Education has been called on to assist. On July 24, a subcommittee conferred with the Federal Commissioner of Education as a preliminary step.

It is impossible at present to state to what extent educational funds have been curtailed on account of the depression. However, public leaders are being led to find out just how far their systems can produce efficient results at a minimum cost. The survey of school finance now being launched by the Office of Education should not only be very helpful in consolidating administration in its fiscal aspects but should serve as a means of introducing economies throughout the entire administration which will not cause instruction to suffer.—*W. J. C.*



Name Expert to Study Radio in Education

Appointment of Cline M. Koon, assistant director of the Ohio School of the Air the past two years, to fill the newly created post in the Office of Education, specialist in education by radio, has been announced by the Secretary of the Interior.

Duties of the new Office of Education specialist will be to initiate and conduct research studies of radio as an educational agency; to organize and maintain an informational and advisory service to schools and other agencies interested in the field of education by radio; to become familiar with college and university extension work so that the part radio as a tool may take in this field may be evaluated; and to prepare material for publication on phases of education by radio.

Mr. Koon was graduated from West Virginia University in 1915 with the degree of bachelor of science, and received his master of arts degree from Teachers College, Columbia University, three years later. For nine years he was principal of high schools in West Virginia.

Creation of the radio specialist position in the Office of Education recognizes the growing importance of education by radio. It was authorized as a result of many recommendations, including one of the national advisory committee on education by radio last year, which stressed the need of such a section in the Office of Education.

The newly appointed radio specialist, through his affiliation with the successful Ohio School of the Air, has made many contacts in the radio field which will be valuable to him in conducting this phase of educational activity in the Federal Office of Education. He assisted in directing educational broadcasts which are now heard regularly in approximately 8,000 schoolrooms.



A \$1,000,000 gift for the establishment of a children's dental clinic in Berlin has been offered by Julius Rosenwald, Chicago philanthropist.

Progress in Ten Teacher-Training Investigations

By E. S. EVENDEN

Professor of Education, Teachers College, Columbia University, and Associate Director, National Survey of the Education of Teachers

THE NATIONAL SURVEY of the Education of Teachers is now one year old. What has been accomplished in 10 specific studies started during the year?

The 10 studies and a description of progress made toward their objectives follow:

1. Fact-Finding Study

This study, needed as a basis for more accurate estimates on supply and demand of public-school teachers and administrators, was the largest single project of the first year. Infinite care was taken in the preparation of the data blank in order to secure the most essential data in the simplest and most usable form. State superintendents and State commissioners of education all cooperated in sending these blanks to city and county superintendents, and these in turn sent them to individual teachers.

Nearly a million questionnaires were sent out from Washington, and 460,000 returns were received. This response was gratifying evidence of the professional interest of teachers throughout the United States, and the returns are more than enough to give accurate data for the country as a whole and for most of the individual States. Answers were transferred to Hollerith cards by 35 regular and temporary employees who also sorted the cards. Tables from this study will be finished during the present summer.

2. Curriculum Studies

(a) One of the most important investigations of the survey examines the courses of study by means of which teachers are prepared. A general question blank to go to all institutions whose graduates enter teaching was prepared and tried out in a few institutions this summer. It will also be sent out this fall. This blank will secure data upon aims, methods of curriculum making, sequence and rank of courses, special features of content and method, preparation of the instructors, observation and student teaching, and extracurricular activities. (b) Standards for selecting a limited number of institutions of different types representing better practices in the preparation of teachers were developed. The list represents seven types of institutions and is also representative of the different regions of the country. (c) Plans and data sheets

were prepared for the analysis of curricula in order to show (1) the kinds of teachers prepared; (2) amount of their preparation; (3) types of courses offered; (4) prescribed content; (5) major and minor organization; (6) content and method of the 10 most representative courses in 15 major fields of subject matter; and (7) other related studies. (d) Plans were made for studying the actual records of courses taken by 4,000 students in the selected list of institutions. (e) A check list and test of student knowledge of professional preparation was started.

3. Reading Interests of Teachers

Data for this study have been secured and the report should be available in the near future. This study was undertaken as part of an investigation of the committee on the reading interests and habits of adults of the American Association for Adult Education and the American Library Association. It was also subsidized by the Carnegie Corporation and the Graduate Library School of Chicago University. It was therefore possible for the survey, with a small outlay, to secure the benefit of the experience of Dr. Douglas Waples, of the University of Chicago, in collecting and interpreting the data.

4. Library Facilities

This study, which is closely related to the reading interest study, will show, for different types of institutions preparing teachers, the physical facilities available in the library, the library personnel, and the specific library material for certain selected courses which are taken by most students preparing to be teachers. This study also should be completed very soon and should afford a more accurate comparison than has been possible heretofore of the library equipment of normal schools teachers' colleges, colleges, and universities. The library is quite obviously one of the important elements in the work of any institution preparing teachers.

5. Bibliography of the Education of Teachers

One of the instruments most needed by a survey staff is an annotated bibliography of the field to be surveyed. A scheme for classification, annotation, and cross-referencing for a permanent bibliography has been developed and about 3,000 selected references in this field have already been assembled. The newly in-

augurated quarterly bibliographical service of the Office of Education will help to keep this material up to date after it is published. Such a bibliography, left in the Office of Education for use after the survey is completed, will greatly increase and facilitate the service which the office can render to individuals or institutions desiring references on special subjects.

6. Measurement Program

Tests for teaching merit which could be checked for reliability and validity against the rating of teachers and against the progress of children under the teachers' direction are being developed and assembled. A set of these was prepared and tried out upon a group of 37 graduate students at Teachers College, Columbia University, 53 Maryland State Normal School seniors, and 65 Pennsylvania teachers enrolled in extension courses in Pennsylvania State College. Three of thirteen tests were retained. They were further refined and others developed to make a battery covering such items as knowledge of educational books and magazines, the most frequently used concepts in education, and concepts of known difficulty in some of the elementary school subject-matter fields. Preliminary trials were made with in-service teachers at George Washington University and graduate students at Teachers College, Columbia University. Scores made on different tests will be correlated with the ratings of those teachers and with any available measures of pupil progress in order to see if there is any persistent relationship.

7. Supply and Demand of Teachers

Dr. Frank Hubbard, of the research division, National Education Association, made a careful study of the supply and demand of teachers as shown by the records of State superintendents and State commissioners of education. The survey contributed toward his traveling expenses in order that he might visit personally a larger number of States. This study also covered State practices in such matters as certification and the control of the States over the normal schools and teachers' colleges.

8. To Measure Thinking of Teachers

A measuring instrument to discover the educational theory or theories which control the thinking of teachers in colleges and teachers' colleges is being tried out under varying conditions in different types of schools, in several different States and with teachers of different subjects. Results will be compared with other data concerning those who take the test such as the amount and kind of training which they have had, their

(Continued on page 18)

Buffalo Builds a High-School Aviation Course

By WILLIAM B. KAMPRATH

Principal, Burgard Vocational High School, Buffalo, N. Y.

ON APRIL 15, 1931, the Curtiss Aeroplane & Motor Co., Buffalo, N. Y., called upon the Burgard Vocational High School to furnish 10 senior students from its aviation department, prior to graduation time, to accept positions for general plane-assembly work. The personnel manager said that he was very desirous of having these 10 students prior to graduation time, and expressed a hope that some special arrangement might be made for them to complete their course and be accredited as graduates of the school. In order to serve the aviation industries of the city, and of the Curtiss Co. in particular, we immediately made arrangements to comply with the request of the Curtiss executives.

Recently a civil-service examination was held for airport mechanics in connection with the field work at the Buffalo Municipal Airport, and two young men of the aviation department of this school passed at the head of the list and received appointments.

Four-Year Course Offered

On April 1st the evening school held its graduation dinner, and, among others, graduated two young men in its aviation department, who have recently opened up a private flying field of their own, and are conducting the port as a commercial landing field as well as operating a flying service, both locally and cross-country.

These are a few instances mentioned for the purpose of showing the tie-up which exists between the aeronautical work of the school and the industry itself, both in factory and field. Buffalo is an outstanding aviation center. A number of manufacturing establishments are located within its limits. About 10 flying fields are to be found within a radius of 10 miles. It is a terminus for air mail and passenger service. The chamber of commerce and the city generally are thoroughly alive to the possibilities of industrial aviation. Recently substantial appropriations were made for the construction of a seaplane base. This entire situation is, of course, advantageous to students of aviation at this school.

At the present time the 4-year course consists of aircraft construction and repair; aircraft-engine repair; aircraft

machine-shop work; aircraft electrical repair; aircraft welding; aerodynamics; meteorology and air navigation; students spending one-half day for four years in shops that are completely equipped and properly appointed for carrying on the above courses, and the other half day in regular high-school subjects, including related trade work in science, mathematics, and drafting.

Our new building, which was opened September 8, 1931, has six shops for aviation work. The advanced aircraft construction shop is one of the largest in any vocational school in the city. It houses about eight complete airplanes, which are the property of the school or are in the shops for overhauling, having been brought from near-by airports. This shop is equipped with overhead tracks, electric hoist for hoisting complete planes from the ground floor to the fourth story, a Curtiss-Wright wind tunnel for experimental purposes, a nibbling machine for metal work, a band saw, variety saw, and various other wood-working machines, as well as a complete tool-room equipment for wing and fuselage work, and assembling and rigging of

planes. Planes owned by the school and located in this shop for laboratory work are Cessna high-wing cantilever plane; Eaglerock low-wing cabin monoplane; Fairchild high-wing folding-type monoplane; Eaglerock center section biplane; Travelair and Waco and Army pursuit planes, and one glider.

Shops for Special Work

Contiguous to this shop is the advanced aircraft engine-repair room which is equipped with about 20 airplane engines mounted on test stands and connected up ready for operation and trouble shooting. This shop is equipped with an exhaust system built into the floor in such a manner as to make it possible to eliminate all exhaust gas from the room. It has an overhead track system, making it easy to handle and erect motors on running-in stands. In addition, this shop has all the work benches, valve-grinding machines, and tool equipment of a service department of a modern airplane repair hangar.

The next shop is devoted to the first-year students in general construction and



BUFFALO'S HIGH-SCHOOL AVIATION COURSE RUNS DAY AND NIGHT

Boys who take the 4-year aviation course get an opportunity to work on real planes and real engines. A wealth of equipment, machinery, and materials gives the students an opportunity to perform practical work in all departments of airplane fabrication.

The Report of the Industrial Education Section of the Survey of Buffalo Public Schools by Maris M. Proffitt (Office of Education Pamphlet No. 17) is just off the press and may be purchased from the Superintendent of Documents, Government Printing Office, Washington, D. C., at 10 cents per copy.

repair, as well as engine work, and is equipped with planes and a dozen airplane engines, as well as several practice fuselages and wings; two airplane engine-test stands; and a paint and dope spraying booth. The fourth airplane shop is that equipped for airplane welding. A separate shop is devoted to aircraft electrical work for instruction in modern aircraft magnetos, aircraft batteries, landing and flying lights, aircraft instrument boards, etc.

The Air Navigation Tower

One complete machine shop is given over to the aviation department for training in airplane machine shop practice, including flat metal fittings work, tube bending, and general machine-shop practice as involved in airplane work. Every aviation student spends 10 weeks in this form of specialized machine-shop work as it relates to aeronautics.

One of the most interesting rooms in the entire aviation department is the one in the tower of the building which is equipped as a laboratory for the study of meteorology and air navigation. In this room may be found all the modern weather instruments, such as wind-direction and wind-speed dials and recorders, sunshine and rainfall devices, cloud indicators, barometers, altimeters, earth-inductor compasses, in addition to every type of aerial map and meteorological chart necessary for training of pilots, student flyers, and airport mechanics. Located on the roof outside the tower is a platform upon which are mounted the outside weather-recording instruments.

In addition to work on planes, engines, and equipment owned by the school, the students do a great deal of work on three airplanes: A Waco, an Eaglerock, and a Commandaire, which are owned by the three Burgard Vocational High School flying clubs that have been organized by the school and are sponsored and directed by the instructors in aviation. Repairs and complete overhauls on these ships are made at regular intervals by transporting the ships from the airport to the school, and, in other instances, repairs are made at the airport where the school is fortunate to own a small workshop equipped with tools, workbenches, lockers, and such materials as are needed for service work at the port.

The flying clubs, which have been in operation since May, 1927, have so far trained approximately 40 fliers. There are at present 3 transport pilots, 10 limited commercial pilots, and the others are private pilots accumulating hours for their more advanced tests.

In the day classes the aviation department has accommodations for approximately 150 students. In the evening school registration is limited to workers in

Seventeen Named to Chart Course of School Finance Study

THE NATIONAL SURVEY of School Finance, authorized by Congress at a cost not to exceed \$350,000 over a 4-year period, is now under way in the Federal Office of Education.

Since the study was launched six weeks ago, more than a dozen temporary employees, including several recognized finance experts, have been making preparations for the more comprehensive work which will follow.

Timon Covert, Federal Office of Education specialist in school finance, and Eugene S. Lawler, senior specialist in the Finance Survey, have been directing preliminary investigations, with the cooperation of Dr. Carter Alexander, Teachers College, Columbia University, and Dr. Mabel Newcomer, professor of economics at Vassar College.

Seventeen finance specialists appointed to the advisory committee of the finance survey have been invited to meet with William John Cooper, United States Commissioner of Education, and Prof. Paul R. Mort, director of the School of Education, Teachers College, Columbia University. Commissioner Cooper is

director of the finance survey and Professor Mort is associate director in active charge of the national study. At the meeting, which will be held in the office of Commissioner Cooper, more definite plans for the various survey projects will be formulated.

The 17 finance specialists appointed by the Secretary of the Interior as finance survey consultants are: William G. Carr, director of research, National Education Association, Washington, D. C.; Louis D. Coffman, president, University of Minnesota, Minneapolis, Minn.; Albert S. Cook, State superintendent of schools, Baltimore, Md.; N. R. Crozier, superintendent of schools, Dallas, Tex.; Fred. R. Fairchild, professor of political economy, Yale University, New Haven, Conn.; Mark Graves, State tax commissioner, Albany, N. Y.; Robert M. Haig, professor of business administration, Columbia University, New York, N. Y.; Arthur N. Holcombe, professor of government, Harvard University, Cambridge, Mass.; L. F. Loree, president, Delaware and Hudson Railroad, New York, N. Y.; Harley L. Lutz, professor of public finance, Princeton University, Princeton, N. J.; Felix M. McWhirter, president, Peoples State Bank, Indianapolis, Ind.; Fred W. Morrison, State tax commissioner, Raleigh, N. C.; Henry C. Morrison, professor of education, University of Chicago, Chicago, Ill.; Orville C. Pratt, superintendent of schools, Spokane, Wash.; George D. Strayer, director of educational research, Teachers College, Columbia University, New York, N. Y.; Fletcher Harper Swift, professor of education, University of California, Berkeley, Calif.; and Rolland A. Vandegrift, director of finance, State department of finance, Sacramento, Calif.

the aircraft factories, pilots, student fliers, and airport mechanics. Enrollment is restricted to 250. Our instructors are practical men who, in addition to thorough experience in airplane factories, are also interested in flying. One of the men is a transport pilot and teaches all the flying to the members of the airplane clubs, which pay him the standard rate for such instruction. These club ships are owned by members of the club, and all expenses in connection with their upkeep are taken care of on a pro-rata basis, there being approximately 10 members in each club.

The manufacturers in and about Buffalo, as well as the owners and operators of fields and flying services, are actively interested in supporting and promoting aeronautical instruction at this school. The United States Navy and the United States Army aided with a generous loan of a great deal of equipment, including engines, planes, and instruments.

Naturally, the aviation course is extremely popular, and last year it became necessary to turn away hundreds of young men who could not be accommodated in spite of the extensive provisions made for this work by the board of education. No freshmen or sophomores were admitted last September. The registration was limited to high-school juniors, seniors, and graduates.

Teach Mental Hygiene in New York High Schools

Mental hygiene is now taught in third-year classes of New York City high schools, with an aim of helping a student discover his own personality, and correct such weaknesses as may stand in the way of his full development. A course in race hygiene is being prepared for fourth-year students.

Beginning this term only those who can show high marks in earlier studies will be admitted for higher learning to the National University of Mexico.

Free Washington Study Course Ready For Teachers

By HAZEL B. NIELSON

Director of Educational Activities, George Washington Bicentennial Commission.

PARTICIPATION IN THE nationwide celebration of the two hundredth anniversary of the birth of George Washington is an activity that will be found in every schoolroom of the Nation this year and 1932. From the primary grade to the university there will be programs, special projects, and courses of study devoted to the "Father of His Country."

The United States George Washington Bicentennial Commission has material for distribution for all divisions of school work and their projects. One of the commission's educational activities of special interest to teachers and student-teachers is the George Washington Appreciation Course published in handbook form.

The aim of this course is to present historical facts of George Washington's life; to instill in the hearts of the students an appreciation of George Washington's contributions to his own period and to posterity, and to interpret the history of the outstanding movements and developments of his period, so that all pursuing the course may be inspired to develop the spirit of Washington in the students that will come under their influence.

Course Has 12 Units

The appreciation course may be presented by four methods: (1) Residence, pursued by students in residence; (2) correspondence, carried on through correspondence by an individual or study group; (3) radio, not designed for school credit, but certificates of recognition will be issued by the commission; and (4) historic travel, including trips to Washington, the Nation's capital, arranged by school authorities as a continuation of the residence or correspondence courses or given as a separate course.

Order Blank for Washington Course

GEORGE WASHINGTON BICENTENNIAL
COMMISSION, Washington, D. C.

DEAR SIR: Please send me a copy
of the George Washington Appreciation
Course.

Name.....

Address.....

Although the George Washington Appreciation Course was especially designed for teachers, it may be pursued by any adult or study group. Many historical societies are organizing groups to avail themselves of the opportunity.

The Handbook of 200 pages covers the 12 units of the course. It also lists the material published by the commission.

Washington's Early Life

The first unit, The Setting for the Course, presents the historical and geographical conditions at the time of George Washington's birth in 1732. Henry Cabot Lodge wrote, "To know George Washington, we must first of all know the society in which he was born and brought up."

Unit two describes the Early Life of George Washington, presenting the interesting facts about his family, home, and activities, stressing Washington's rules of civility.

The third unit deals with The Young Manhood of George Washington, featur-

Next Month

"What Poems and Stories About Washington Children Like Best"

ing the youth himself, his activities—life in the home of his brother Lawrence and in the home of Lord Fairfax, his love of horseback riding and fox hunting. His early occupations as a surveyor, soldier, politician, and farmer at Mount Vernon are brought out.

In unit four, George Washington a Leader of Men during the Struggle for Independence, the history of the Revolution is presented, stressing Washington's part in the Revolution, the race contributions to the American Army, and the contributions made by women during the Revolution.

The fifth unit presents the period of peace following strife. George Washington a Private Citizen Immediately Following the Revolution furnishes many new fields for learning of Washington as a builder of peace, of his interesting life as a farmer, his home life, and his many friends.

Unit six, entitled "George Washington a Leader in the 'Critical Period' of American History (1783-1789)," introduces an opportunity for a study of the

background of the Federal Constitution, the essentials of American constitutional government. The part played by George Washington in the creation of a nation is emphasized.

This is followed in unit seven by George Washington the Executive, an understanding of the international relations which confronted Washington. Then follows in unit eight, George Washington a Private Citizen following the Presidency, the story of his last years at Mount Vernon, when people came from far and near to pay him homage. Unit nine, Selected Tributes to George Washington, will be helpful as a reference for authentic tributes from the time of Washington's death to the present.

Historic Travel Course

While unit ten introduces a study of Washington the Nation's Capital, it is not a departure from the achievements of Washington, for topics refer to Washington's participation in the city's creation. Many references are made to the publications about the city and in particular to the available material published by the Fine Arts Commission, and The Capital of the United States: a Heritage from George Washington, being prepared by the United States George Washington Bicentennial Commission. The material is so arranged that it may be correlated with a study of art, civics, and geography. As a whole it furnishes a background for those enrolling in the historic travel course.

A distinctive unit in the appreciation course is unit eleven, Correlation of This Course with Other Subjects of the Curriculum in which suggestions are made for linking up a study of George Washington with agriculture, art, business, civics, geography, health education, home economics, literature, and music, as well as with the extracurricular activities. Unit twelve will give the student the opportunity of considering the Contributions of George Washington to Civilization.

The use of the handbook is not dependent upon a particular textbook. The two main sources of information prepared by the commission to be used with this handbook are:

1. Forty-eight papers on the subjects in the 12 George Washington programs which are issued in a series of 12 pamphlets. The list of selected books relating

The Work of the National Flag Association

By JAMES A. MOSS

Colonel, United States Army, Retired; President General of the United States Flag Association

THE FIRST STEP in education, which will, in time, control the war instinct, must be the inculcation of rational patriotism—that is, patriotism free from egoism, vainglory, braggadocio, and jingoism; patriotism that recognizes the fact that while every man should love his country and be loyal to its flag, there are men of other lands who are just as much entitled to love their countries and be loyal to their flags; a patriotism that realizes no one country has a monopoly on the good things of the world, and that every country can learn things from other countries; a patriotism whose spirit is the kinship of the human race.

Program of the Association

As a matter of fact, rational patriotism is a sentiment whose spirit is found in the eternal principles of freedom, equality, justice, and humanity on which the Republic of the United States of America is founded.

Basic principle.—With the inculcation of rational patriotism as its purpose the

to George Washington used as authority for these papers is found on pages 9 to 12 of the pamphlet of programs issued separately.

2. Sixteen pamphlets of the series honor to George Washington and readings about George Washington. Selected authorities are listed in each pamphlet.

Reference is made to many current histories and biographies. Many quotations are included in each unit, which will be helpful to the teacher or student who does not have access to a large library. Each unit is prefaced by a brief outline setting forth the main topics and correlated subtopics to be considered in the developed outline.

A valuable feature of the handbook is the introduction of 25 black-and-white illustrations, which give a visual presentation of each period of Washington's life. This feature arouses enthusiasm for an exhibition of Washington material in the schools.

An examination of the handbook reveals that the Washington material seems to be without end. The material in the handbook presents to the teacher what is authentic and worth while for use in the schools where building for good citizenship is a principal concern. Thousands of handbooks have already been sent to every section of the country.

program of the United States Flag Association is founded on the principle that in order to have proper respect and consideration for the ideals, traditions, and institutions of other countries one must first understand and appreciate the ideals, traditions, and institutions of his own country.

Scope.—The program consists of two parts: (1) *Annual flag project.*—Annually competitive flag projects, in which suitable awards are offered, are held among the high schools of the United States, each project consisting of (a) a certain number of questions on the ideals and institutions symbolized by the flag of the United States, and (b) a short essay on some suitable subject. In each annual project the idealism of the Flag of the United States as a symbol of good will toward other countries is emphasized, and special stress is placed on our national emblem as symbolizing the great peace accomplishments of the Nation rather than its war achievements. (2) *Patriotic pilgrimage and good-will trip.*—The regional winners in the competitive flag project are taken on a pilgrimage to patriotic shrines in this country and given a trip to one or more foreign countries for the purpose of (a) extending greetings of good will to the children of such countries from the children of America; and (b) inviting the youth of the countries visited to join the youth of the United States in forming a union of friendship among the youth of all the nations of the earth.

Advisory Council Formed

The program of the United States Flag Association is strongly indorsed by United States Commissioner of Education Wm. John Cooper, who has expressed the hope that it would be adopted by all the States of the Union as part of their civic education schedules; also by Secretary of the Interior Ray Lyman Wilbur, who has characterized the flag association's program as "logical, sound, and scientific."

Henceforth, the program of the United States Flag Association for the education of American youth in rational patriotism will be conducted with the guidance of an educators' advisory council which consists of the president of the National Congress of Parents and Teachers, the president of the National Education Association, the president of the World Federation of Education Associations, and State superintendents and commis-

sioners of education, 41 of whom have accepted service as members of the council. United States Commissioner of Education Wm. John Cooper is chairman of the council.

Accomplishments So Far

The first year more than 250,000 boys and girls, representing 4,000 schools and other units, participated in the program of the United States Flag Association. Eighteen boy and eighteen girl regional winners were assembled in Washington and taken on a pilgrimage to several of our principal patriotic shrines, and two girls and two boys were then sent on a good-will trip around the world. This year 11 boys and girls, representing youth organizations, schools, and groups, were taken on the patriotic pilgrimage in this country and afterward sent on a good-will trip to France and England where they were received by the Prince of Wales, Prime Minister MacDonald, the Archbishop of Canterbury, the Lord Mayor of London, the President of France, and Mr. Briand, all of whom commended them on the purpose of their visit. In both France and England the good-will visit of our young envoys of friendship struck a most sympathetic and responsive chord. The Minister of Public Instruction of France has promised that the visit will be returned next year by a group of children to be selected from the public schools of that country, and there is reason to believe that a group of British boys and girls will also make us a return good-will visit.

It is planned that the next good-will trip of the United States Flag Association will be to Germany, Austria, and Italy.

It is hoped that after the movement for the inculcation of rational patriotism in youth has become established in the United States similar projects will be started in other countries, and in time be carried on in all the countries of the world in an organized, systematic way.



Special Opportunities for Gifted Students

For art students of more than average ability in public schools of Detroit, through cooperation of the Detroit Institute of Arts, Saturday morning classes have been established, and a total of about 60 students receive instruction. Teachers are provided by the board of education. Soundness of the teachers' judgment in their selection of students for the special opportunity was verified by an art-judgment test given by a member of the staff of the University of Iowa, which rated 40.6 per cent of the special Saturday students as unusual, 40.6 as superior, and the remaining 18.8 per cent attained a high average.

When Teachers of the World Met at Denver

By JAMES F. ABEL

Chief, Division of Foreign School Systems, Office of Education

"LET ALL THE nations be gathered together and let the people be assembled" is inscribed on the corner stone of the municipal auditorium in Denver. Probably the man who chiseled those words there in 1907 had little thought that in a short two dozen years the aftermath of a World War and threats of other wars would bring to that building men and women teachers from 25 nations to consider how education can be so shaped as to create better understanding among all peoples and prevent war for all time.

But during the last week of July they were there out of places as distant from Denver as this little planet of ours affords. Turbaned Indians versed in Hindu lore from the India that Columbus hoped to reach; Indians in feathers and moccasins from the land he did reach; orientals from the China that has had many more centuries of experience with civilization than any other country, and from westernized Japan; folk from old Baghdad, Palestine, and Syria, and from new New Zealand; occidentals out of the west and center of Europe, and the West, no longer wild, of the United States; from republic, democracy, kingdom, empire, colony, and protectorate, Near East, Far East, near West, far West, far North, and far South came together for one purpose, the outlawry of war.

Despite the economic depression and the inland location of the meeting place they came; 104 from other countries, more than 1,800 from parts of the United States outside of Colorado, while the State and city furnished 2,000.

Representatives of a Million Teachers

The specific occasion for this gathering was the fourth biennial conference of the World Federation of Education Associations, a federation that was founded in San Francisco in 1923 and held its previous meetings at Edinburgh, Toronto, and Geneva. Still a young federation—for eight years is a very short time in the life of movements like this—it now has in its full membership about 25 organizations, including such large and powerful groups as the National Union of Teachers of England and Wales, the Bund Entschiedener Schulreformer of Germany, All India Federation of Teachers Associations, Japanese Education Association, Canadian Teachers Federation, and the National Education Association of the

United States. Among its associate members are 29 State education associations, 46 city and town organizations of teachers, 3 of country-wide membership, 5 connected with universities and teachers' colleges, and 20 associations like the National Congress of Parents and Teachers, interested in some special phases of human training such as adult education, care of crippled and defective children, and nursery schools. In toto the groups that go to make up the federation must have a membership of nearly a million teachers and other persons interested in education.



SECRETARY OF WORLD FEDERATION

Dr. Augustus O. Thomas, founder of the World Federation of Education Associations, has retired from the presidency to become executive secretary. Dr. Paul Monroe was elected president.

For this Denver meeting the federation was organized into 14 departments, among which were: Rural life, illiteracy, social adjustment, health education, geography, preparation of teachers, educational crafts and one each for the four levels of instruction. In addition the five Herman-Jordan committees set up to carry on the plan to produce world understanding and cooperation through education for which Dr. David Starr Jordan won the \$25,000 Herman prize were in regular session.

Monroe Speaks on World Unity

The sessions of the home and school, and child health departments and those of the social adjustment section drew large groups, for it must be kept in mind that this federation is primarily one of

teachers, teachers of the kind that do the daily classroom work. Here were the real and the tangible that they could learn and understand and use for the benefit of the children in their care. Interest in these sessions was heightened by reports of conditions in other countries.

The general meetings were shaped, of course, to emphasize the main purpose of the federation, "the promotion of friendship, justice, and good will among the nations of the world." Before the second general meeting came M. Georges Milsom, director of the League of Red Cross societies, to tell in French of the work of the Red Cross and the Junior Red Cross with their twelve and one-half millions of members carrying on relief duties in 48 countries. Following him Dr. Paul Monroe, director of the International Institute of Teachers College, Columbia University, told the assembly that the world had attained something of economic unity, that it is approaching political unity, and that it is moving slowly toward cultural unity. In support of his belief in the growing cultural unity he cited, first, the large number of students attending foreign universities, 4,000 in France, 1,000 each in England and Germany, and 10,000 in the United States; second, the political effect of the cinema; third, the several countries that are adopting the Latin alphabet; and, finally, the modern means of rapid communication and travel.

New President Elected

At the strikingly interesting Friday session speakers read their papers from a stage on which were placed six machines connected with international telegraph and radio lines. Messages of greeting were sent to Toronto, London, Paris, Buenos Aires, Honolulu by way of New York, Shanghai, ships in the Atlantic and Pacific Oceans, and to various places in the United States. The replies came back in from 5 to 20 minutes after the sendings. On the map of the world, placed at the back of the stage, electric lights traced the courses of the messages.

Two changes in the federation's administrative personnel are of unusual interest. Dr. Augustus O. Thomas retired as president and Dr. Paul Monroe was chosen as his successor. Doctor Thomas, who is the founder of the organization and for eight years has filled its difficult presidency, is offered the place of executive secretary and a remuneration in part commensurate with the heavy and increasing duties of the position. For Sir Frank Goldstone, long secretary of the National Union of Teachers of England and Wales, attendance at Denver was one of the last of his official duties. He retired on September 1 and carries with him his recently acquired knighthood conferred

Are You Writing a Thesis? Read This Offer

Fresh facts! Who wants some fresh facts?

The Office of Education has on hand the finest collection of data on the teaching personnel of the United States ever brought together. Qualified research students may obtain it on very good terms.

Early last spring the Office of Education sent out a 2-page questionnaire to the 1,000,000 teachers of the United States. Nearly half a million teachers filled in the questionnaire. Information they supplied has been transferred to tabulating cards which contain all information except names and addresses. The master cards are being retained by the Office of Education for use in the National Survey of the Education of Teachers, progress of which is reported elsewhere in this issue, but the Office of Education offers to permit any State department of education, university, or qualified research agency to obtain duplicate cards for any State or any major groupings of teachers, such as all social-science teachers. Interested students will apply through some such agency.

Some agencies have already taken advantage of this offer. The State Teachers College at Greeley, Colo., has requested cards for Colorado teachers, the University of Minnesota has asked for Minnesota cards; both Nebraska and Pennsylvania State Departments of Education have asked for duplicate cards for use in State surveys. Doctor Krey, of the University of Minnesota, has asked for duplicate cards for all social-science teachers of all the States.

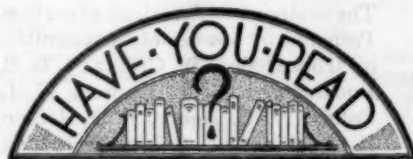
In the opinion of the directors of the National Survey of the Education of Teachers this information on teaching personnel, collected on a large scale for the first time, offers a golden opportunity for advanced workers in education to make studies of problems in education for which data have never before been available. Graduate students who plan theses this year will do well to consider this valuable mine of information in Washington, D. C.

For information on what material can be had on duplicate cards, how it can be obtained, and the cost, write to United States Commissioner of Education, Department of the Interior, Washington, D. C.

by the King of England for his services to education.

Among the more important recommendations of the conference were: (1) That an international university board be formed to establish a uniform system of evaluating entrance credits and to assist in adjusting the foreign student to his new environment; (2) that teacher-training institutions make the study of international relations and world peace a required subject in the curriculum; (3) that the study of the feasibility of international radiobroadcasting of educational programs for school children of other nations be commended to the national educational authorities and to those in charge of radiobroadcasting in each country in the hope that a plan of cooperation to this end may be worked out; (4) that teachers colleges and schools of education having graduate departments offer courses in comparative education where not already offered, and that qualified students be encouraged to elect these courses; and (5) that the federation pledges its active support to the purpose of the conference for the reduction and limitation of armaments. Other resolutions dealt with education for young people living in rural areas, means for maintaining continuous contacts among workers in the field of child health, and the teaching of geography in such a way as to give a clearer appreciation of the common life problems of all peoples and of their contributions to present-day world civilization.

Where and just when the fifth session will be held is not yet decided.



Drawing by Robert G. Eakel, Boys' Technical High School, Milwaukee, Wis. Instructor, R. E. Cote

By SABRA W. VOUGHT

Librarian, Office of Education

Under the caption "Socrates on the 8-hour shift" John Palmer Gavit has contributed a sparkling article to the June *Survey Graphic*. Rollins College is the subject discussed. The reorganization of the Office of Indian Affairs is discussed at length in an article by Lewis Meriam in the June *Survey Graphic*. The title, "Indian education moves ahead," shows something of the author's enthusiasm for the new plan.

"Keeping up with our children," an address delivered by the United States Commissioner of Education, William John Cooper, before the parent-teacher section at Ypsilanti, Mich., in January, 1931, appears in full in the May issue of *The American Schoolmaster*. Another address of Doctor Cooper's "A democratic method of performing an autocratic function" is published in the

Educational Outlook for May.

The June number of the *Journal of Adult Education* contains several of the papers in full, and abstracts of many others, which were presented at the sixth annual meeting of the American Association for Adult Education. These, with the report of the director of the association, also contained in this issue, give a clear account of the progress of adult education. In discussing the "Functions of the Junior College Library," in the *Junior College Journal* for May, Edith M. Coulter points out some of the opportunities afforded by it, that are too often overlooked by junior college administrators. The *Liberal Arts College Bulletin* for June is devoted to the historic development of American colleges. The articles are well illustrated and trace the growth of the colleges from colonial days. In the *Scottish Educational Journal*, for July 10, appears an account of an unusual summer school. At New College, Oxford, there was held from June 27 to July 4, a course for leaders of group discussions of wireless talks. It was under the auspices of the Central Council for Broadcast Adult Education. During the past year more than a thousand small groups have met to discuss and criticize radio programs. An interesting account of this summer conference shows how the leaders of these groups are prepared for their task. This newest phase of education was discussed in a building that has been used continuously for educational purposes since April, 1388.

Roy N. Anderson of Teachers College, Columbia University, in an article in the *Personnel Journal* for August, discusses occupations for college women under the title "What may the college woman expect by way of a job?" He presents statistics of occupations and salaries of 891 college women. Two articles that should be of special interest to those who were unable to attend the Los Angeles meeting of the N. E. A., as well as to those who were there, appear in *School and Society* for July 25 and August 1. The first, by William Dow Boutwell, sketches the high lights of the program and gives in full the resolutions adopted by the convention. The second, from the pen of Doctor McAndrew, paints a brilliant picture of the social and "extraconventional" phases of the meeting.

Geography lessons are not what they used to be. In Yellowstone National Park nearly 90,000 persons attended lectures and went on field trips during the month of June as compared with about half that number for the same period last year.

New Books in Education

By MARTHA R. McCABE

Library Division, Office of Education

Bagley, William C. *Education, crime, and social progress.* New York, The Macmillan Co., 1931. xiv, 150 p. tables, diagrs. 12°.

While the author is not blaming our scheme of education with the present conditions of crime, divorce, prevalence of corruption in public office, etc., he does attempt a thoughtful presentation of material which involves a two-fold purpose: To identify the elements of weakness in our educational system; and to suggest elements of strength to replace them. Two outstanding problems confront us: The by-products of the Industrial revolution, social and economic change, unemployment, etc.; and some of the things that the American people are not doing, characterized by President Hoover as "the subsidence of our institutional foundations." The author deals with the handicaps of character education, discipline, and dogma, the shibboleths of the curriculum, the fallacy of the aim of rural education to keep the rural child on the farm, scrapping the traditional school subjects and replacing with "activities"; and other pet theories of educators and slogans of teachers—the play way, creative impulse, free school, etc.

Burgess, Isaac Bronson. *The life of Christ.* For the use of students of high-school age. Adapted from *The life of Christ* by Ernest D. Burton, and Shailer Mathews, by Isaac Bronson Burgess. Rev. ed. Chicago, Ill., The University of Chicago Press, 1930. xxii, 282 p. illus., maps. 8°. (The University of Chicago studies in religious education, ed. by Shailer Mathews, Theodore G. Soares, W. C. Bower. Constructive studies)

This constructive study attempts to meet the need of the teacher without too strict an adherence to any predetermined curriculum, so the editors state, with special stress placed upon stimulating the self-activity of the student, expecting the teacher to discover the special needs of the class being taught. The point of view taken is that re-experience of historical events is possible and that a transfer of experience may be made by the pupils, who thus are trained in the use of constructive imagination and to apply such to their own needs in any life situations that may arise. In this case, the aim is to apply the life and teachings of Jesus to life situations and social conditions to-day.

Department of supervisors and directors of instruction of the National Education Association. *Fourth yearbook. The evaluation of supervision...* New York City, Bureau of Publications, Teachers College, Columbia University, 1931. vii, 181 p. tables, diagrs. 4°.

This study was compiled by a committee of the department composed of eight specialists, Clifford Woody being chairman, and is the fourth in a series of studies on supervision. The output of publications of this department suggests the growing importance of the work of supervisors of instruction in the school system. The book has several objectives: To outline criteria to be applied in evaluating supervision; to offer essential procedures in simple form; to review existing

literature with a summary of procedures and techniques employed; to tabulate investigations made by members of the department regarding evaluation of supervisory activities; and to give a check-list for supervisors to use in self-evaluation. It is the result of group thinking, and not of individuals, is theoretical in part only, the major section consisting of summaries of published investigations and studies undertaken by the membership of the department.

Engelhardt, Fred. *Public-school organization and administration...* Boston, New York [etc.] Ginn & Co. [1931] xvi, 595 p. tables, diagrs. 8°.

To apply the same effective principles of business management to the school systems that are used by successful business organizations is the objective of school executives to-day. To know how to do this is their problem. The author presents a careful collection of facts and suggestions for school boards and superintendents in the organization and administration of all of the parts and activities that contribute to the school system. This includes not only the legal aspects and the finances involved, but the subjects of the personnel, school programs, the curriculum, supervision in its varied aspects, the library in the school, and the organization for research. While the study is primarily intended for school executives, and for the most part deals with school districts, and not the work of the State, the author had in mind its use by training schools for the preparation of superintendents, principals, and supervisors.

Thirtieth yearbook. Part II. *The textbook in American education.* Prepared by the society's committee on the textbook, W. C. Bagley, B. R. Buckingham, G. T. Buswell, W. L. Coffey, N. B. Henry, F. A. Jensen, C. R. Maxwell, Raleigh Schorling, and J. B. Edmonson, chairman, assisted by Ellwood P. Cubberley and Herman G. Richey. Edited by Guy Montrose Whipple. Bloomington, Ill., Public School Publishing Co., 1931. viii, 364 tables. 8°.

This study fills a long-standing need for a careful investigation of the position and problems of textbooks in our educational program. It includes not only the making of textbooks, but conditions under which they are selected and distributed, methods of analysis, problems of reading difficulty and vocabulary, techniques for selecting the material to be used, illustrations, type, questions, exercises, etc. Five years of activity were consumed, the investigation involving conferences with both schoolmen and publishers, study of textbook legislation, and other important questions. A bibliography of 91 annotated, unclassified entries concerned with textbooks is furnished.

Thorndike, Edward L. *Human learning.* The Messenger lectures, Cornell University, fifth series, 1928-29. New York, The Century Co., 1931. 206 p. tables, diagrs. 12°. (The Century psychological series, Richard M. Elliot, editor)

While a part of the material incorporated in this volume has been used by the author else-

where, much of it consists of discussions of results of very recent experiments in the field. Everyone is interested in man's ability to learn. The author has presented his theory of the evolution and future possibilities of human learning, accompanied by many experiments in connection with it in an interesting and lucid manner. He states "that man's power to change himself, that is, to learn, is perhaps the most impressive thing about him."

Thwing, Charles Franklin. *American society. Interpretations of educational and other forces.* New York, The Macmillan Co., 1931. ix, 271 p. table. 12°.

Doctor Thwing has chosen the period just before the Great War and the decade just following as the setting for these chapters. In his long connection with Western Reserve University he has had opportunity to observe widely the way in which higher education functions and its articulation with society, and to formulate interpretations therefrom. He deals with the best and worst in American society, with the American family, the effect of the war on European higher learning, and gives a comparison of our Civil War and the Great War. He describes liberal education and society after the Great War and discusses the tests of civilization with application to our own Nation, and finally, the growth of institutions in American society.

Teacher-Training Survey

(Continued from page 11)

teaching experience, and various other factors. If there seems to be any consistent relationship between the results of the test and any or all of these other factors in a teacher's equipment, it is planned to give the test to larger numbers of teachers and also to find whether it has any value as a test or diagnostic instrument for teachers during their pre-service period of preparation.

9. History of Teacher-Training

A comprehensive history of the training of teachers in the United States is being prepared. This study will point out any discoverable trends which have affected the development of our teacher-training institutions and practices. Such a historical study is needed as a basis for interpreting present problems and for evaluating proposals for future programs. The possibility of preparing a study on the social and economic status of teachers is also under consideration.

10. In-Service Preparation of Teachers

Because of the very rapid rate at which standards for teachers have been raised in recent years it has been necessary for increasingly large numbers of teachers to secure additional education and professional preparation during the times they have been employed. As a result in-service preparation of teachers has become very important in the teacher-training programs of most States. The survey has started extensive studies on in-service education.



New Government Publications Useful to Teachers



Drawing by Charles Sasoma, Boys' Technical High School, Milwaukee, Wis. Instructor, R. E. Cote.

Compiled by MARGARET F. RYAN

Editorial Division, Office of Education

The publications listed may be purchased from the Superintendent of Documents Government Printing Office, Washington, D. C., at the prices stated. Remittances should be made by postal money order, express order, coupons, or check. Currency may be sent at sender's risk.

Training Objectives in Vocational Education in Agriculture. 1931. 31 pp. (Federal Board for Vocational Education. Bulletin No. 153, Agricultural Series No. 39.) 5¢.

General aim, nature, and scope of vocational education in agriculture. Prepared primarily for the use of agricultural teachers in vocational departments and may be adapted to all-day, part-time, and evening classes. (Vocational education; Agriculture; Adult education.)

Slip Covers. 1931. 8 pp., illus. (U. S. Department of Agriculture, Bureau of Home Economics, Leaflet No. 76.) 5¢.

Uses of slip covers, complete instructions for making them, and selection of material. (Home economics.)

A Public-Health Survey of Oklahoma. 1931. 24 pp. (U. S. Treasury Department, Public Health Service, Reprint No. 1458.) 5¢.

Brief outline of why and how agencies outside the health department should be organized and utilized; the existing machinery for public-health work in the State department of health—its defects and its needs. (Public health; Parent-teacher associations.)

Feeble-minded and Epileptics in State Institutions, 1926 and 1927. 1931. 62 pp. (U. S. Department of Commerce, Bureau of the Census.) 15¢.

Admissions, discharges, and patient population for State institutions for feeble-minded and epileptics. (Special education.)

Animal and Vegetable Fats and Oils. 1931. 27 pp. (U. S. Department of Commerce, Bureau of the Census.) 5¢.

Production, consumption, imports, exports, and stocks of animal and vegetable fats and oils. (Economics; Chemistry; Geography.)

Yearbook of Agriculture. 1931. 1113 pp. (U. S. Department of Agriculture.) \$1.50 cloth.

In short popularly written articles the results of research and service activities conducted by the United States Department of Agriculture are given. (Economics; Research; Agriculture.)

The Speech Defective School Child—What Our Schools are Doing for Him. James Frederick Rogers, M. D. 31 pp. (Office of Education Bulletin, 1931, No. 7.) 10¢.

Contents: I. Defects of speech; II. Special work for speech-defective children in city school systems; III. What some State departments of education are doing; IV. The problem of the small community; V. Summary. (Special education.)

Survey of Public Higher Education in Oregon. 298 pp. (Office of Education Bulletin, 1931. No. 8.) 45¢.

Made upon request of the president of the Oregon State Board of Education. (Higher education.)

Eggs at Any Meal. 1931. 8 pp. (U. S. Department of Agriculture, Leaflet No. 39.) 5¢.

Recipes for cooking eggs in favorite combinations such as omelets, souffles, whips, custards, sauces, and salad dressings. (Home economics.)

Beef Production on the Farm. 1931. 14 pp., illus. (U. S. Department of Agriculture, Farmers' Bulletin No. 1592.) 5¢.

Development of beef cattle in the United States, the breeding stock, feeding and management of the herd, feeding and management of calves, salt requirements, feeding cattle for market, and sanitation and disease preventions. (Animal Husbandry.)

Some Common Disinfectants. 1931. 10 pp. (U. S. Department of Agriculture, Farmers' Bulletin No. 926.) 5¢.

Properties and uses of some of the disinfectants that are commonly used about the household and the farm (Agriculture; Chemistry.)

Feeding Chickens. 1931. 22 pp., illus. (U. S. Department of Agriculture, Farmers' Bulletin No. 1541.) 5¢.

(Poultry husbandry.)

Fig Insects in California. 1931. 72 pp., illus. (U. S. Department of Agriculture, Circular No. 157.) 20¢. (Horticulture.)

Reports to the President on: Woven wire fencing and netting (No. 5), 16 pp., 5¢; Wood flour (No. 6), 10 pp., 5¢; Pigskin leather (No. 7), 8 pp., 5¢; Hats, bonnets, and hoods of straw (No. 8), 10 pp., 5¢; Maple sugar and maple sirup (No. 9), 13 pp., 5¢; Wool floor coverings and ultramarine blue (Nos. 10 and 11), 14 pp., 5¢; Edible gelatin (No. 13), 8 p., 5¢; Wool-felt hat bodies and hats (No. 15), 12 pp., 5¢; Cigar-wrapper tobacco (No. 16), 43 pp., 10¢. (U. S. Tariff Commission.) 1931. (Economics; Agriculture; Geography.)

Report of the Virgin Islands Agricultural Experiment Station, 1930. 1931. 19 pp., illus. (U. S. Department of Agriculture, Office of Experiment Stations.) 5¢.

Includes the report of the director of the animal husbandman and veterinarian, of the horticulturist, of the agronomist, of the agriculturist for St. Thomas and St. John, as well as a report on meteorological observations. (Agriculture; Animal Husbandry; Horticulture, Meteorology, Geography.)

Suggestions for Teaching the Job of Controlling Black Stem Rust of Small Grains in Vocational Agriculture Classes. 1931. 16 pp., illus. (Federal Board for Vocational Education, Leaflet No. 1.) 10¢.

Prepared in order to assist teachers of vocational agriculture in offering systematic instruction in the control of black stem rust, in connection with the grain growing enterprises included in the yearly curriculum. (Agriculture.)

Chemical Industry and Trade of Portugal. 13 pp. (Bureau of Foreign and Domestic Commerce, Trade Information Bulletin No. 760.) 10¢.

Portugal's foreign trade in chemicals—imports and exports and trade with the United States; her production and trade—naval stores, wine lees, crude drugs and botanicals, agricultural chemicals, insecticides, paints and varnishes, medicinal and pharmaceutical preparations, toilet preparations, and other chemicals are discussed. (Economics; Chemistry; Geography.)

Flame Safety Lamps, Devices for Detecting Fire Damp, and Miners' Electric Lamps. 1931. 67 pp., illus. (Federal Board for Vocational Education, Trade and Industrial Series No. 12.) 15¢.

Technical information for use in vocational training classes, particularly evening trade extension courses for coal miners. (Vocational education; Safety education.)



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